FLIGHT DELAY PREDICTION

YEAR	AUTHORS	OBJECTIVES	METHODOLOGY	FINDING	PROBLEMS
2017	Gopalakrishnan Balakrishnan	Variables like quarter of the year, year, month, day of month, and day of week have been used to get insights on seasonality. Other variables that were investigated include the origin and destination airports and departure and arrival times.	After the identification of input variables, we collected the relevant data on those variables. Several classification models were then trained and tested. The data collection process data pre-processing in data transformation and description of classification models .	Variables to be used to study the impact on airline On-Time performance.	For a decision maker, understanding the factors that may impact the outcome of their decision is important.
2020	Yogita Borse Viral Vora	Flight Planning is one of the challenges in industrial world which faces many uncertain conditions. One such condition is delay occurrence, which stems from various factors and imposes considerable costs on airlines, operators, and travelers.	Various methodology can be applied to implement the system that predicts the delay in flight. Decision Tree: As the name suggest the main idea behind decision tree algorithm is to make a tree like structure and get the answers in form of true of false. The model begins from a root node and ends on the decision	As discussed, weather condition plays an important role in proper and timely functioning of flights. We propose a flight delay prediction system which focuses mainly on predicting delay of a flight based on the weather situation.	As discussed, considering the standard taxonomy of the flight delay and its problems, one will contemplate the scope of prediction.Statistical model requires the use of correlation analysis, parametric and non parametric tests, multivariate analysis and econometric models.
2020	L. Carvalho A. Sternberg	The main problems related to flight delay prediction are identified and	The flight delay prediction problem may be modeled in many ways, depending	Root delay propogation Researchers createprediction models to tackle	Problem is the core feature in domaintaxonomy. As seen there are three major

		organized in a taxonomy. It includes scopes, models, and ways of handling flight delay prediction.	on the objectives of the research. Methods were divided into five groups they are Statistical analysis, Probabilistic, Network, Machine learning, Operational.	root delay, predicting when and where a delay will occur and what are its reasons and sources.	concerns regarding the flight delay prediction Problem: delay propagation, root delay and cancellation.
2020	Maryam Farshchian Yazdi, Seyed Reza Kamel	As the air travels have a signifcant role in economy of agencies and airports, it is nec-essary for them to increase quality of their services. One of the important modern life challenges of airports and airline agencies is fight delay.	In this section, we issues to represent a our technique in which we tried to solve the problems related to massive data, processing complications lack of computational space, overftting and existing noise in data	The model is designed using Machine Learning in Tensor fow and is installed on a system of 40 core CPU at a frequency of 2.6 hz.	Flight delay has negative economic efects on the passenger, agencies and airports. Terefore, any reduction of these efect requires decreasing postponed fight price, so that prediction or estimation has a great signif-cance and numerous studies has been to dedicated this subject
2021	Viran Raj Satyam Singh	We are proposing machine learning algorithms like Linear regression Techniques. The aim of this research work is to predict Flight Delay.	A.Using Linear Regression: Sincelogistic regression is appropriate for categorical values, and we expect to predict the potential delayed time, which is a numerical valuable, it makes more sense to apply Linear Regression for our model. B.Using Logistic Regression: Actual Arrival time - Expected Arrival Time + (Actual Departure time - Expected Departure .	A.Logistics Regression Model B.Linear Regression Model C. Initial Data Exploring D. Dimensionality Reduction.	No data mining projects could be finished without thoroughly understand the data first. We renamed the original data column names and validated the nulls, however with a little different approach. After data cleaning we start the first process of exploring our data if there were any patterns within the independent variables.